

JAMES H. DOUGLAS
GOVERNOR



State of Vermont
OFFICE OF THE GOVERNOR

SMARTVERMONT
Connections – Jobs – Progress
March 26, 2009

Even as Vermonters face the most challenging economic times in decades, we must seize the opportunity to build a foundation for a prosperous future. Preserving Vermont values and improving our state's physical infrastructure and economic environment in the competitive global marketplace requires building a *SmartVermont*.

Now is the time to make bold investments in both new and traditional businesses to ensure that Vermont's economy is one of the first to recover from the national recession. Relatively low cost power, great connectivity, a well-educated and trained workforce, and an e-government that is open and welcoming will create a favorable environment for employers, employees and all residents to succeed.

Achieving the promise of *SmartVermont* will require using the one-time American Recovery and Reinvestment Act (ARRA) funds to support a physical and technological infrastructure and existing and emerging businesses for the 21st century. If the state places this money carefully, the state will continue to realize the benefits of this investment long after the stimulus funds stop flowing.

This document is divided into four sections:

- I. *SmartVermont* Goals
- II. The Foundation of a *SmartVermont*
- III. Smart Investments in Job Creation
- IV. Smart Investments in Energy & Conservation

‡ **SMARTVERMONT GOALS**

In a *SmartVermont*:

- There are enough good jobs and interesting careers in growing sectors for Vermonters and their children, whether with a technical education or an advanced degree from our great colleges or university.

- All Vermont residents have high-speed broadband with the equipment and training to use it.
- All public schools have ultra high-speed connections to the Internet and teachers are ready to instruct the “e-Generation” in a connected world.
- E-health and electronic health records improve outcomes and lower the cost for care.
- A smart electric grid means that both consumers and businesses have greater control over their electric bills and can take advantage of abundant, green off-peak power to lower both costs and carbon footprint.
- Energy conservation and alternative generation projects mean environmentally-friendly energy production, less money flowing out of state, and lower operating costs for all institutions.
- The tax base is robust enough to support a restructured e-government, which delivers better service at lower cost than we are able to provide today.

These are ambitious goals, but they can and will be achieved by smart targeting of federal stimulus funds and state resources. E-health, e-learning, and the smart grid all use the same common broadband infrastructure which completes the e-State Initiative and makes possible universal broadband and cellular coverage at reasonable prices.

‡ **THE FOUNDATION FOR SMARTVERMONT**

The foundation of *SmartVermont* is a robust telecommunication platform that enables high-speed communication everywhere in Vermont. Building on the work done to implement the e-State since passage of Act 79 in 2007, Vermont now plans to use additional funding from ARRA to move past its goal of universal broadband availability to universal broadband penetration. Every Vermonter who doesn't choose to live off grid will have broadband connectivity, broadband equipment, and necessary training to be plugged in and online. Every Vermont school will have very high speed access to the Internet.

This connectivity is valuable to Vermonters and the Vermont economy by itself, but it is also the information backbone for the Smart Grid, e-Health, and e-education. The same network which makes web access possible will be used to provide the communications infrastructure necessary to carry data to and from smart meters and give consumers the information they need to control energy usage and reduce costs. This network is also the infrastructure for e-health and assures, for example, that every doctor's office in Vermont will be online, as will the residence of everyone receiving home care.

E-education requires not only that schools be connected but also that teachers know that all students can go online and do homework which might, for example, require an online search. A teacher can't responsibly assign online homework if even a small percentage of the class doesn't have computers or broadband access. Kids can't be prepared for the real world unless they have online homework. Vermont's universal connectivity enables e-education.

Although the rules for seeking many of these grants have not yet been written, Vermont is already working to write coordinated grant requests so that money spent from different federal agencies for broadband, smart grid, e-health, and e-education is reinforcing and all contributes to our overall goal of building *SmartVermont*.

- Achievements to Build On -

Vermont is already a leader in building the electrical grid (Smart Grid) of the future. Vermont Electric Cooperative (VEC) already has installed smart meters at 75% of its customer sites and is using them both to reduce meter reading cost and speed recovery from outages. Once pilot rates have been set by the Public Service Board and member education is completed, VEC will be ready to give consumers much more information and control over electric costs.

VELCO, the state's wholesale transmission utility, has completed fiber buildout to all its substations and extensive substation automation. Green Mountain Power already has innovative green incentives for alternative energy generation during peak periods and very efficient operations; it is ready to move quickly to smart metering. CVPS has a fully developed plan for a smart network and grid. Burlington Electric is a pioneer in generating energy from renewable resources.

Vermont's application will be for money to finish the job of building a smart grid and to demonstrate the efficiency and environmental advantages of a grid that is intelligent from the customer premise all the way back to the generation source. Other states are only beginning the process. Vermont already has the lowest carbon footprint per capita for electrical generation. We will be able to reduce both costs and our carbon footprint while using clean off peak electricity to displace fossil fuel for both transportation and some heating applications.

For the better part of a year Vermont utilities, the Public Service Department, the Department of Information and Innovation (DII), and the Vermont Telecommunications Authority (VTA) have been developing plans for a shared backbone communication network which will be available to serve other Vermont connectivity needs as well. Money from the ARRA will accelerate this plan; having this plan ready to go will increase Vermont's chances of obtaining competitive funding from a variety of ARRA programs.

The work the VTA has done in mapping Vermont's connectivity needs and planning a network for mobile coverage has put Vermont ahead of most other states in being ready

to present a convincing plan based on facts and solid engineering. The VTA's \$40 million in revenue bonding authority is a "shovel ready" match for federal funds.

The NorthLink project is a valuable start to the backbone fiber network needed in the most remote parts of the state. It is also a model for a utilities working with communication infrastructure providers.

Burlington Telecom is an oft-cited example for municipal broadband. EC Fiber has plans to bring the same technology to rural towns. Vermont is ready to use ARRA funds to complete its 100% broadband deployment.

- Fast Planning for Competitive Grants: Vermont's Advantage -

ARRA contains \$4.5 billion dollars nationwide for Smart Grid projects which will be awarded competitively by the Department of Energy. There is \$4.5 billion for the deployment of broadband from the Commerce Department and an additional \$2.5 billion available from the Department of Agriculture; both of these programs are competitive. There are additional large sums available for the development of e-health and for educational technology. Vermont has a coordinated approach building on planning and past achievements which advantage its applications for substantial portions of this money. Although it is impossible to predetermine federal grant awards, because of its early work and advanced planning, Vermont is well-positioned to draw down \$100,000,000 or more in competitive grants to leverage both state funds and private sources.

Since the passage of ARRA in February, the Public Service Department and the Office of Economic Stimulus and Recovery (ESR) with the help of Vermont's Congressional delegation have worked to bring both telecommunications providers and utilities together.

Telecommunications providers have responded with all the jigsaw puzzle pieces which, if funded, will bring affordable broadband to every part of Vermont. We are still waiting for grant rules but we will be able to put together a credible coordinated proposal backed by solid achievement and engineering as soon as the rules are known.

The PSD and ESR have also worked with electrical utilities, which together serve the vast majority of Vermonters, and have reached agreement on ambitious coordinated goals to be accomplished by the time the ARRA money has all been spent. These plans, which are still being discussed, include 100% smart meters; a grid that's smart from the residence through transmission, storage and generation; a lower peak electrical load and carbon footprint than we have today; and an electric network which is ready for plug-in hybrid electric vehicles, displacement of fossil fuels for heating, and dispersed alternative energy sources. Each of these is an area where we will seek demonstration project grants. We expect to be successful both in seeking funds and carrying out our projects.

‡ **SMART INVESTMENTS IN JOB CREATION**

Getting Vermont's economy moving again is our most important priority, and using Vermont's flexible funding from ARRA for job creation is vital to position Vermont for recovery. Of the \$94 million in State Fiscal Stabilization Fund (SFSF) within ARRA, 18.2%, or \$17.1 million, is available to Vermont over two years for essential state services. (This \$17.1 million is over and above the 81.8% of the SFSF dedicated to preserving spending levels in public education.) The Governor's *SmartVermont* proposal seeks to allocate the entire \$17.1 million to essential job creation and economic development activities. In total, the \$17.1 million will leverage as much as \$160,000,000 in low interest loans, working capital and equity investment for existing employers, growing businesses and start-up companies.

A large portion of the *SmartVermont* proposal relies on the good work, long history and strong lending expertise of the Vermont Economic Development Authority (VEDA). Since VEDA uses state moral obligation as the basis for raising private capital or a reserve for loan guarantees, and as VEDA loans become an incentive for banks to co-invest, each dollar put into VEDA can result in a substantial return on investment.

Stimulus & Interest Rate Subsidies (VEDA)

Goal: New Business Investment

	State Funding	VEDA Financing	Private Capital	Total Projects
2009-2010	\$1,000,000	\$18,000,000	\$27,000,000	\$45,000,000
2010-2011	\$1,000,000	\$18,000,000	\$27,000,000	\$45,000,000
			Total	\$90,000,000

In 2008, as part of Governor Douglas' Economic Stimulus Package, the General Assembly authorized VEDA's Economic Recovery and Opportunity Program (EROP) to offer low-interest loans to stimulate immediate investments in eligible economic development projects. VEDA participates with other financial institutions to bring a lower blended rate to borrowers.

Through the EROP, \$18 million in loan funds were made available starting in July 2008 to be used by June 30, 2010. Since then, more than \$6.2 million has already been loaned out and another \$6 million committed through this successful program.

To build upon this success, Governor Douglas proposes investing an additional \$1 million in each of the next two years in the interest rate buy-down program by tapping the State Fiscal Stabilization Fund (SFSF) of the American Recovery and Reinvestment Act (ARRA). Allocating \$1 million can leverage \$18 million in VEDA financing, as well as an additional \$27 million in private capital, for a total of \$45 million in each of the next two years to fund important economic development projects.

At a time when even healthy businesses are finding it more difficult to expand, this program can ensure that Vermont employers can continue to make the necessary investments to expand their businesses and create new jobs.

Strategic Retention Fund: Working Capital & Flexible Funding for Existing Businesses (VEDA):

Goal: Provide Working Capital for Existing Businesses

	State Funding	VEDA Financing	Private Capital	Total Projects
2009-2010	\$1,500,000	\$7,500,000	\$7,000,000	\$15,000,000
2010-2011	\$1,000,000	\$5,000,000	\$5,000,000	\$10,000,000
			Total	\$25,000,000

Working capital is higher risk lending as loans are generally collateralized with inventory and receivables, which can deteriorate quickly in value if a company finds itself in difficulty. This program fills an important need during difficult economic times. It will be available for all companies, but is intended to assist some of Vermont's larger employers who may be struggling and finding it difficult to obtain all of their working capital from their banks. That is why Governor Douglas believes that expanding opportunities for businesses to secure working capital is a necessary step to retain and create jobs.

The \$2.5 million in funding from the SFSF for the next two years would go to cover loss reserves and could leverage up to \$25 million in VEDA financing and private capital. Only banks that already have the infrastructure to effectively monitor and administer working capital lines of credit will be permitted to participate in this program. The loans are expected to be a 50%-50% split between VEDA and the banks with VEDA absorbing the first losses.

Technology Loan Program (VEDA):

Goal: Loans for Emerging Technology Companies

	State Funding	VEDA Financing	Private Capital	Total Projects
2009-2010	\$1,000,000	\$6,000,000	\$4,000,000	\$10,000,000
			Total	\$10,000,000

In Vermont, the growing technology sector of our economy has demonstrated real promise in providing high-paying, quality jobs for Vermonters. Technology companies, however, often do not have traditional "bankable" assets making them more risky for lenders than traditional asset-based lending.

Governor Douglas proposes using \$1 million of the SFSF for loss reserves to secure technology loans made by VEDA. This \$1 million investment can secure up to \$6 million in VEDA loans, as well as an additional \$4 million in private capital for a total of \$10 million in capital for technology companies in Vermont.

Investments in our technology sector today will allow Vermont to continue to diversify its economy and be a leader in these emerging industries. Examples might include wireless internet service providers, software development firms or businesses wishing to implement health information technology.

Small Business Lending (VEDA):*Goal: Increase Small Business Growth*

	State Funding	VEDA Financing	Private Capital	Total Projects
2009-2010	\$1,000,000	\$4,000,000	\$2,500,000	\$6,500,000
2010-2011	\$1,000,000	\$4,000,000	\$2,500,000	\$6,500,000
			Total	\$13,000,000

Small businesses make up the greatest portion of Vermont's employment base, with roughly 4 out of 5 Vermonters working for a small business. Critical to creating and preserving jobs is ensuring that new and existing small businesses have an opportunity to succeed, even in these difficult economic times. The goal of this program is to increase the growth of small business in Vermont.

This program combines an interest rate subsidy model with a working capital loan program for small business. The program is intended to assist existing small businesses to expand working assets and to help others maintain operations. The small business lending program includes \$2 million of SFSF funds for two years, of which \$1.1 million will go towards interest rate subsidies and the remaining \$900,000 will go to a loss reserve for higher risk small businesses and start-ups.

Farm Operating Loans (VEDA):*Goal: Spring Seed Assistance for Farmers*

	State Funding	VEDA Financing	Private Capital	Total Projects
2009-2010	\$1,500,000	\$8,000,000	-	\$8,000,000
			Total	\$8,000,000

For one of Vermont's legacy industries, difficult economic times have been compounded by falling commodity prices, rising fuel costs and other challenges. By offering lower rate operating loans, farmers will have greater access to working capital at this critical time.

This program is an expansion of previously successful VEDA programs that brought assistance to Vermont farmers in 2004 and in 2006. Loans will be at subsidized rates and used for farm operating needs such as feed, fuel and fertilizer. Loans will also be eligible under this program to consolidate existing open accounts farmers may already have for the types of operational "inputs" described above. Federal guarantees are likely to not be available for these loans. High input costs and low milk prices also add to the risk profile of these borrowers. The \$1.5 million is split between a loss reserve of \$1.2 million and \$300,000 for interest rate subsidies.

Seed Capital Fund (VEDA):*Goal: Assist Early Stage Entrepreneurs*

	State Funding	VEDA Financing	Private Capital	Total Projects
2009-2010	\$2,000,000	\$2,000,000	\$4,000,000	\$6,000,000
2010-2011	\$2,000,000	\$2,000,000	\$4,000,000	\$6,000,000
			Total	\$12,000,000

Even in a recession, Vermont must find creative ways to encourage innovators and entrepreneurs. Seed capital will support those organizations whose projects carry above-average risk but have the potential for substantial growth and job creation.

Access to capital is generally the biggest obstacle facing new and innovative businesses whose plans are not supported with a great deal of historical data. The \$2 million in Seed Capital funding in each of the next two fiscal years has the potential to leverage an additional \$4 million in VEDA financing and \$8 million in private capital for a total of \$12 million in new investment in early stage companies.

A state investment in this program will be used for direct equity investments in these dynamic businesses, which will provide growth and jobs that may prove less susceptible to future economic downturns.

Opportunity Zone Funding – SmartSpots (RDCs):*Goal: Reinvest in Abandoned Industrial Sites using SmartVermont Principles**2009-2010: \$1,000,000*

The Department of Economic Development (DED) will make grants available to regional development corporations for re-developing older industrial buildings which have been mostly vacant for more than 10 years and are at least 15,000 square feet (formerly known as Opportunity Zones).

Bringing near derelict property back into service is time consuming and expensive. Without funding, it is difficult for RDCs to undertake these speculative projects. DED would grant money to diminish the costs involved in project preparation – the costs of project development and design, estimating, pre-selling and environmental design. The goal is to help the regional economic development experts bring these projects to readiness for a developer to complete.

The Opportunity Zone proposal (under legislative consideration) would additionally allow tax incentives for the businesses once they are located in these renovated projects.

DED would accept qualified applications, conduct site visits, verify feasibility and financial viability before granting the funds to ensure the community will reap the benefits of the investments, providing jobs, bringing buildings back into use and alleviating environmental impacts of the existing structures.

Regional Revolving Loan Fund Coordination (RDCs):*Goal: Support RDC Job Creation with Supplemental Capital*

2009-2010: \$750,000

2010-2011: \$350,000

The State will make funds available to regional development corporations that establish a substantial revolving loan fund with the purpose of extending working capital to businesses within their region to sustain these businesses through this economic cycle. Job retention and creation will be given priority funding as will businesses who provide value added product and capital importation.

Once the RLF is established, RDCs will be further encouraged to coordinate RLF's in their region with additional funding available for the RLF. RDCs will be encouraged to work with a banking partner to conduct the financial accounting while retaining the decision making at the RDC level. There are many inactive RLFs throughout Vermont and by coordinating lending capability within a region, more lending activity will help local businesses, spread the risk among lenders with a goal of keeping Vermonters employed.

Early Stage Business Support (VCET):*Goal: Assist Early Stage Entrepreneurs*

2009-2010: \$250,000

2010-2011: \$250,000

A recent study of their economic impacts has found that business incubators can be prolific job creators – in some cases, providing up to 20 times the number of jobs as compared to infrastructure projects for similar public investments. The Vermont Center for Emerging Technologies (VCET) is a leading-edge technology business incubator in our state. VCET offers early-stage businesses access to necessary services such as furnished office and laboratory space, business consultation, shared office equipment, administrative support, business education and workshops. To further support early stage companies and encourage their growth and development, the Governor proposes a \$500,000 investment in VCET for the next two years.

Tourism and Marketing Promotion:*Goal: Spur Tourism through 2009-2010*

2009-2010: \$1,000,000

Travel is America's fifth largest industry and one of the largest service-sector exports. Travel for business, leisure, meetings and events – both domestic and from abroad – is a major driver in the nation's economy, producing \$740 billion in direct travel expenditures, \$115 billion in tax revenue for local, state and federal governments and directly employing nearly 8 million American workers.

According to an analysis conducted by Economic and Policy Resources, Inc. for the Department of Tourism and Marketing, estimated visitor spending in Vermont was \$1.57

billion in 2005. That resulted in an estimated \$3.1 billion impact on Vermont's \$22.7 billion Gross State Product, about 13.7 percent of the state's total, and 36,250 direct and indirect jobs, about 12 percent of the state's total employment of 300,941 for that year.

Investments in this sector benefit virtually every corner of Vermont in some form or fashion. In these tough economic times, promoting our state as an economical travel destination can help the thousands of Vermonters whose livelihood depend on this sector.

Vermont Training Program

Goal: Upgrade Skills for 21st Century Jobs

2009-2010: \$500,000

For businesses to remain competitive in the global economy, they must have access to a talented and well-trained workforce. Stimulus funds entering the state through the American Recovery and Reinvestment Act will be used to support and expand the highly successful Vermont Training Program (VTP). The customized training of workers provided by VTP in previous years has been a critical element in the success and growth of businesses both large and small.

In the 2008 fiscal year, the VTP completed 81 contracts with Vermont companies, providing support to nearly 5,000 Vermonters with on-the-job training, classroom learning and lean-manufacturing programs. Workers trained through these programs earned an average hourly wage of \$15.95.

Each dollar invested in the VTP yields an estimated \$2.67 in revenues to Vermont's economy. Governor Douglas proposes investing \$500,000 from the SFSF to ensure that Vermont employees have the tools they need to remain competitive in the 21st century workforce and help their companies compete.

‡ SMART INVESTMENTS IN ENERGY & CONSERVATION

Another key component of SmartVermont is alternative energy generation and energy conservation. Through strategic use of energy funding included in ARRA, we can expand in-state generation and compound the benefit of our Smart Grid.

Non-Profit Institution 0% Interest Loan Program

Goal: Dedicated Energy Efficiency Funds for Colleges & Hospitals

2009-2010: \$10,000,000

Public and private colleges, hospitals, and other institutions will be eligible to apply for zero percent interest loans for energy efficiency. Projects will be ranked according to return on investment and savings will more than cover repayment. Long term benefits include reduced operating costs going forward and reduced fossil fuel use as well as more comfortable and attractive buildings. Efficiency may be achieved through generation or cogeneration. Money will be available for re-lending as repaid.

Energy Efficiency and Conservation Block Grants

Goal: Broader Energy Efficiency Grants – Towns Eligible

2009-2010: \$12,300,000

Exact amount and distribution formula through ARRA are not yet known. Non-profit and for-profit institutions are likely to both be eligible. The 10 largest cities and towns will receive their funding directly.

Renewable Energy Project Fund

Goal: Spur Renewable Energy Generation Projects

2009-2010: \$17,500,000

This fund will offer a variety of loan and grant programs to encourage construction of renewable energy projects in Vermont. Long term benefits include cheaper, more distributed power sources, less use of fossil fuel, development of exportable renewable skills and technologies. Importantly, this fund will leverage Smart Grid investments. It includes \$5 million of existing 2010 Clean Energy Development Fund money.